

**In the Specification:**

At page 4, lines 12-14, please amend the paragraph as follows:

FIG. 4A shows a SWNT device formed using a liquid ~~catalyst~~ catalyst delivery approach involving patterned catalyst material, according to another example embodiment of the present invention;

At page 6, lines 12-24, please amend the paragraph at line 18 as follows:

In another example embodiment, a catalyst growth approach involves growing a SiO<sub>2</sub> substrate layer on a p-type silicon (Si) wafer using high-temperature oxidation in a wet environment. The Si wafer is oxidized in an environment (*e.g.*, in a thermal oxidation chamber) that includes hydrogen (H<sub>2</sub>) and oxygen (O<sub>2</sub>) at a H<sub>2</sub>:O<sub>2</sub> ratio of about 3:20 and at a temperature of about 1000°C. The substrate is cleaned with a solvent (*e.g.*, copious amounts of acetone, methanol and/or isopropanol) and then dried under a gas stream including an inert gas, such as ~~[[a]]~~ nitrogen (N<sub>2</sub>). After cleaning, the SiO<sub>2</sub> substrate is immersed in a scintillation vial containing a solution of about 10 mL of water and about 10 μL of 10 mM FeCl<sub>3</sub>·6H<sub>2</sub>O (aq). About 100 μL of 40 mM hydroxylamine hydrochloride (NH<sub>2</sub>OH·HCl) (aq) is immediately introduced into the vial and reacted with the FeCl<sub>3</sub>·6H<sub>2</sub>O to form iron-containing nanoparticles on the SiO<sub>2</sub> substrate. After the formation of the iron-containing nanoparticles, the SiO<sub>2</sub> substrate is taken out of the solution, rinsed (*e.g.*, consecutively with water, acetone and isopropyl alcohol) and dried.

At page 7, lines 11-20, please amend the paragraph as follows:

In another approach involving the furnace chamber such as that discussed above, a co-flow of H<sub>2</sub> carrier gas is introduced during the flow of a carbon-containing gas for CVD growth of carbon nanotubes from a substrate having catalyst particles formed thereon. The amount of H<sub>2</sub> co-flow is selected to maintain growth of carbon nanotubes while inhibiting undesirable material from forming on the substrate (*e.g.*, inhibiting pyrolysis). For general information regarding carbon nanotube growth, and for more specific information regarding co-flow approaches that may be implemented in connection with one or more of the example embodiments of the present invention, reference may be made to U.S. Patent Application Serial No. 10/285,311 (~~STFD.024PA/S01-210~~) filed on October 31, 2002 and entitled "Carbon Nanotube Growth," now U.S. Patent No. 7,183,228, which is fully incorporated herein by reference.

At pages 8-9, lines 24-31 and 1-9 respectively, please amend the paragraph as follows:

For general information regarding carbon nanotubes, and for specific information regarding carbon nanotube implementations to which one or more example embodiments of the present invention may be applicable, including those embodiments discussed in the previous paragraph, reference may be made to the following patent documents, all of which are fully incorporated herein by reference: U.S. Patent Application Serial No. 10/042,426 (~~STFD.021C1~~), filed on January 7, 2002 and entitled "Carbon Nanotube Structure Having a Catalyst Island" (*e.g.*, to which formation of iron oxide nanoparticles discussed herein may apply); U.S. Patent Application Serial No. 10/175,026 (~~STFD.019DIV1~~), filed on June 18, 2002 and entitled "Carbon Nanotube Devices" (*e.g.*, to which formation of carbon nanotubes discussed herein may apply); U.S. Patent Application Serial No. 09/858,783 (~~STFD.020C1~~), filed on May 15, 2001 and now U.S. Patent No. 6,900,580, entitled "Self-oriented Bundles of Carbon Nanotubes and Method of Making Same" (*e.g.*, to which formation of iron oxide nanoparticles discussed herein may apply); and U.S. Patent Application Serial No. 10/164,891 (~~STFD.016DIV1~~), filed on June 7, 2002 and entitled "Carbon Nanotubes and Methods of Fabrication Thereof Using a Catalyst Precursor" (*e.g.*, to which formation of iron oxide nanoparticles discussed herein may apply and to which implementations with carbon nanotubes as probe tips may apply).

At page 11, lines 15-24, please amend the paragraph as follows:

FIG. 4A [4] shows a carbon nanotube device 400 grown using a catalyst (*i.e.*, iron oxide) nanoparticle formation approach such as those discussed herein, according to another example embodiment of the present invention. The device 400 includes a substrate 405 (*i.e.*, a SiO<sub>2</sub> substrate) and a SWNT 420 extending between two electrodes 410 and 412 formed on the substrate. An iron oxide material is formed on, at or as a part of at least one of the two electrodes 410 and 412. The substrate 405 with the iron oxide material is prepared as discussed above, for example in connection with FIGs. 1A and 1B, by immersion in a solution and subsequent calcination. The carbon nanotube 420 is then grown, for example also using the approach discussed in connection with FIG. 1C involving CVD growth.

At page 13, lines 1-8, please amend the paragraph (by inserting a space before 440) as follows:

FIG. 4C shows another approach for growing SWNTs that is similar to that discussed in connection with FIG. 4A, according to another example embodiment of the present invention. In this instance, wells 441 and 443 are formed in a PMMA layer 431 on a SiO<sub>2</sub> substrate 405, and catalyst portions 440 ~~portions440~~ and 442 are formed in the wells using one of the solution immersion and calcination approaches discussed herein. SWNTs 450 and 452 are then grown extending from the catalyst portions 440 and 442 using CVD deposition of carbon. With this approach, patterned growth of SWNTs can be achieved for a variety of implementations.